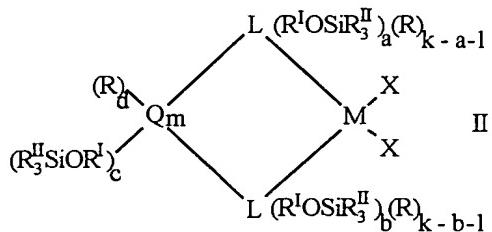
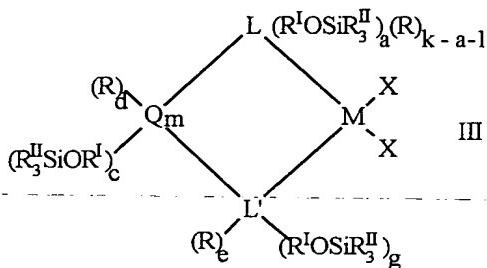


Abstract:

The invention relates to heterogeneous catalytic systems obtainable by reacting a porous inorganic support with an alumoxane and subsequently supporting at least one metallocene compound thereon, characterized in that the metallocene compound is defined by
5 the following general formulas:



10



wherein:

L, equal to or different from each other, is selected from the group comprising:
15 cyclopentadienyl, indenyl, tetrahydroindenyl, fluorenyl, octahydrofluorenyl or benzoindenyl; each R is independently selected from hydrogen, C₁-C₂₀ alkyl, C₃-C₂₀ cycloalkyl, C₆-C₂₀ aryl, C₃-C₂₀ alkenyl, C₇-C₂₀ arylalkyl, C₇-C₂₀ alkylaryl, C₈-C₂₀ arylalkenyl, linear or branched, optionally substituted by 1 to 10 halogen atoms, or a group SiR^{II}₃; each R^I, equal to or different from each other, is a divalent aliphatic or aromatic hydrocarbon group containing from 1 to 20 carbon atoms, optionally containing from 1 to 5 heteroatoms of groups 14 to 16 of the periodic table of the elements and boron ; preferably it is: C₁-C₂₀ alkylene, C₃-C₂₀ cycloalkylene, C₆-C₂₀ arylene, C₇-C₂₀ alkenyl, C₇-C₂₀ arylalkylene, or alkylarylene, linear or branched, or a group SiR^{II}₂; each R^{II} is independently selected from C₁-C₂₀ alkyl, C₃-C₂₀ cycloalkyl, C₆-C₂₀ aryl, C₃-C₂₀ alkenyl, C₇-C₂₀ arylalkyl, C₈-C₂₀ arylalkenyl or C₇-C₂₀ alkylaryl,
20 linear or branched; preferably R^{II} is methyl, ethyl, isopropyl; each Q is independently selected
25

- from B, C, Si, Ge, Sn; **M** is a metal of group 3, 4 or 10 of the Periodic Table, Lanthanide or Actinide; preferably it is titanium, zirconium or hafnium; each **X** is independently selected from: hydrogen, chlorine, bromine, OR^{II}, NR^{II}₂, C₁-C₂₀ alkyl or C₆-C₂₀ aryl; **L'** is N or O; **z** is equal to 0, 1 or 2; **x** is equal to 1, 2 or 3; **y** is equal to 1, 2 or 3; **x + y + z** is equal to the
5 valence of **M**; **m** is an integer which can assume the values 1, 2, 3 or 4; **a** and **b** are integers whose value ranges from 0 to k-1; **f** is an integer whose value ranges from 1 to k; **g** is an integer whose value ranges from 0 to 1; **c** and **e** are equal to 0 or 1; **a + b + c** is at least 1; **a + g + c** is at least 1; **d** is equal to 0, 1 or 2; when **Q** is B then **c + d** = 1; when **Q** is C, Si, Ge or Sn, then **c + d** = 2; when **L'** is N, then **g + e** = 1; when **L'** is O, then **g** = 0 and **e** = 0.
- 10 The invention also relates to the polymerization process making use of the above defined catalytic

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